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63-3-2

REPORT NO.
CSR-169(9990)QBR-3

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Quarterly
Bibliography of Reports
Prepared Under Contract No. AF 04(695)-169

(Period Covering 1 January Through 31 March 1963)

Prepared for COMMANDER SPACE SYSTEMS DIVISION

UNITED STATES AIR FORCE

Inglewood, California



AEROSPACE CORPORATION

APR 20 1963

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Report No.
CSR-169(9990)QBR-3

BIBLIOGRAPHY OF REPORTS
PREPARED UNDER CONTRACT NO. AF 04(695)-169
① (Period Covering 1 January Through 31 March 1963)

Compiled by
Barbara H. Peer

AEROSPACE CORPORATION
El Segundo, California

15 April 1963

Contract No. AF 04(695)-169

Prepared for
COMMANDER SPACE SYSTEMS DIVISION
UNITED STATES AIR FORCE
Inglewood, California

FOREWORD

This bibliography lists all reports published (whose listing is not prohibited by their sensitive nature) during the period 1 January through 31 March 1963 under Contract AF 04(695)-169, in accordance with the requirements of AFBM Exhibit 58-1. Aerospace Corporation reports written under this contract are identified by the inclusion of the (-169) element in the report number (see Section I).

Reports published during the first and second quarters (1 July through 31 December 1962) are listed in CSR-169(9990)BR-1 and CSR-169(9990)QBR-2, respectively.

Supplements to the bibliography are issued at three-month intervals during Fiscal Year 1963, the period covered by the present contract. Reports written under this contract, but not published during the fiscal year, will be listed in supplements periodically issued after fiscal-year end. Definitive closing-out of the bibliography will be issued with a cover which will indicate "Final Supplement."

Section I

AEROSPACE CORPORATION REPORT NUMBERING SYSTEM

AF BM Exhibit 58-1 (1 October 1959) establishes the contractual requirements for reports generated by Aerospace Corporation and other contractors engaged in missile and space vehicle programs under Air Force Systems Command cognizance. This exhibit defines the various types and categories of reports, standardizes formats and other necessary practices, and directs the contractor as to his privileges in exchange of reports.

Basically Exhibit 58-1 provides for three main categories of reports:

1. Contract Status Reports (program progress, funding status, manpower status or planning, bibliography, etc.)
2. Technical Operating Reports (flight and other types of test data, engineering analysis, etc.)
3. Technical Documentary Reports (These are in one of two forms, namely, Technical Reports or Technical Notes, and reflect scientific and technical records of research and development efforts. They may be either definitive or exploratory, factual or problematical, general or specific.)

The Aerospace report numbering system is designed for compatibility with the requirements of Exhibit 58-1, and to provide report numbers that have a definite significance and meaning for identification, collection, storage, and retrieval purposes. This numbering system incorporates five significant factors:

1. Letter symbols indicating the type or category of the report (e.g., CSR, TOR, TDR).
2. A number representing the contract [e.g., 169 represents Contract AF 04(695)-169].
3. The number of the Job Order of the task or project to which the report is related [e.g., 3260-01 Space Physics, General].**

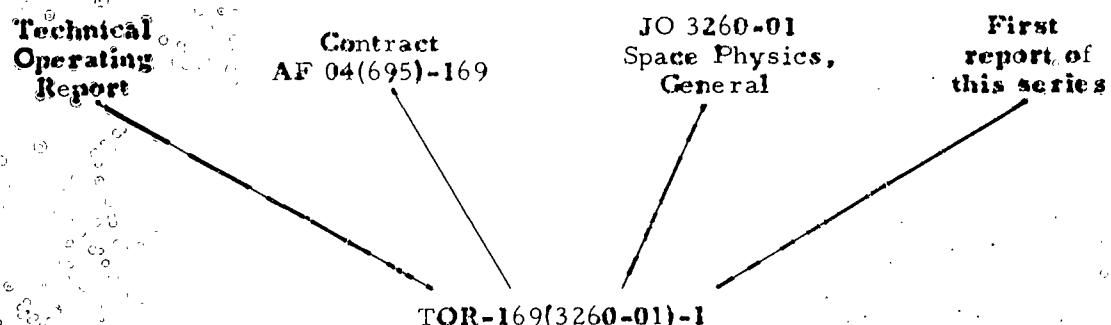
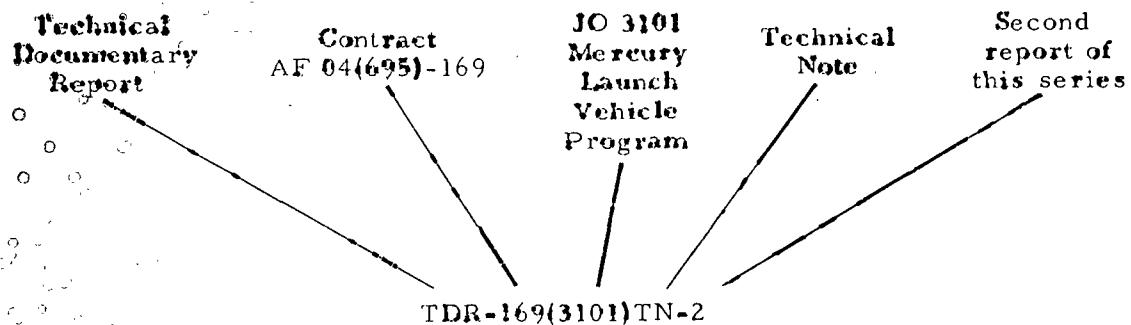
Reports initiated under the previous contract, AF 04(647)-930 [definitized Contract AF 04(695)-69], but continued and published under the present contract include the (-930) or (-69) element in the report number (see Section VI):

The letter A or S preceding the job order number indicates a report originated by the Atlantic Missile Range or the San Bernardino operations, respectively.

4. Letter symbols designating the series which the report represents (e.g., MPR, Monthly Progress Report; PP, Program Plan; TR, Technical Report; TN, Technical Note).

5. A number indicating the sequence of the report within its series (e.g., #1, #2, #3, etc.).

Examples of Aerospace Report Numbers



Section II

ORGANIZATION OF BIBLIOGRAPHY

Reports listed in the bibliography are sectionalized in four categories:

1. Contract Status Reports
2. Technical Operating Reports
3. Technical Documentary Reports
4. Other Reports

Page entries contain the following information:

1. Item number
2. Aerospace report number
3. Title
4. Author
5. Publication date

6. Classification - Security classification codings used are TS (Top Secret), S (Secret), C (Confidential), RD (Restricted Data). In addition, reports classified for limited access by Aerospace Corporation are coded LA.

In this bibliography, Aerospace Corporation reports grouped in each sectional category are listed in numerical order by job order number and by series (see Section I). To facilitate use of these sequential listings, a Job Order Index, identifying job order numbers with major subject areas, is included in this section.

<u>Job Order</u>	<u>Subject Area</u>
2110	Satellite Control Program
2112	Program 621A
2113	Program 479A
2114	Program 698AM
2119	Re-entry Systems Program
2121	Engineering Technology
2408	Management Systems Development Office
2701-01	Applied Research Management Support of AFDCAS/TAC-General
3101	Mercury Launch Vehicle Program
3109-02	Program 814 (Basic)
3110	Satellite Control
3114	Program 823
3116-20	Program 624A--Systems Operations and Test
3116-40	Program 624A--Vehicle Systems
3126	Gemini Launch Vehicle Program
3128-01	Program 464 (Basic)
3151	Program 479A
3152-01	Program WS-325A--MRBM--General
3153-01	Program 627A--Advanced Ballistic Re-entry Systems--General
3201-01	Propulsion Research--General
3210-01	Propulsion Research--General
3230-01	Aeromechanics--General
3240-01	Materials--General
3250-01	Electronics--General
3260-01	Space Physics--General
3301-01	Instrumentation, Test Engineering and Range Facilities--General
3303	Reliability
3305	Other Engineering Technology (SSD)
3335	Other Engineering Technology (BSD)
3355	Standard Launch Vehicle III (SLV III)
3408	MSDA--Design and Development
3451	MSDS--Design and Development
3504-01	Plans Integration--General
3506-01	Space Orbiter Systems--General
3515-01	Propulsive Vehicle Systems--General
3530-01	Manned Space Systems--General
3540-01	Sensing and Information Sciences Subsystem and Techniques--General
3550-01	Aerodynamic Studies--General
3560-01	Spacecraft Subsystems and Techniques--General
3580-01	Ballistic Missile Systems--General

Job Order

3711-01

Applied Research TAM Support--Aerospace
Vehicle Detection and Defense Techniques
(730F) Air Force Technical Support

3712-01

Applied Research TAM Support--Flight Vehicle
Power (750F) Air Force Technical Support

3780

Program 920F
General Administration

9990

Subject Area

Section IV. CONTRACT STATUS REPORTS

CSR • 169 (3101) MPR64

Progress Report Mercury/Atlas Launch Project @ NASA Project 12/1/62 C

CSR • 169 (1101) MERR

Progress Report Mercury/Aurora Launch Vehicle Program for NASA Project Gemini

CSR-1689990 MPR-6
Vol. I

© Monthly Progress Report, Vol. 1.

CSIR-1691989 MPR-7,
Vol. 1

Monthly Progress Report Vol. I

CSR-169{9990}MPR-8.
V-1

Monthly Progress Report, Vol. I

CSB-169(9990)PP-6*

Presentation, ©
16 November-15 December 1962

Section III. CONTRACT STATUS REPORTS (continued)

CSR-169(9990)PP-7

Professional Papers Cleared for
Possible Publication and/or
Presentation, 16 December 1962-15 January 1963
F. A. Brady 1/31/63 U

CSR-169(9990)PP-8

Professional Papers Cleared for
Possible Publication and/or
Presentation, 16 January-15 February 1963
F. A. Brady 2/28/63 U

Section IV. TECHNICAL OPERATING REPORTS

TOR-169(3101)-3	Detailed Test Objectives for NASA Mission MA-9	3/ /63 S
TOR-169(3110)-10	Satellite Control Facility, Computer Program Design Criteria for Tracking Stations Supporting Program 823	12/10/62 S
TOR-169(3110)-10, Supp. 1	Satellite Control Facility, Computer Program Design Criteria for Tracking Stations Supporting Program 823, Supplement 1: Payload Telemetry Format and Identification	12/10/62 S R&D
TOR-169(3110)-13	Satellite Control Facility Equipment Augmentation--Design Criteria: CLE-BK Interface, Panel Equipment	2/1/63 C
TOR-169(3114)-2	Program 823 System Test Plan	12/20/62 S
TOR-169(3114)-3	Design Trajectory for Program 823	1/22/62 C
TOR-169(3116-40)-3	Dyna Soar Ascent Guidance Equations	3/15/63 S
TOR-169(3126)-6	Complex 19 Demonstration Criteria for the Gemini Launch Vehicle	11/30/62 U
TOR-169(3126)-8	Gemini Launch Vehicle Parameters Handbook	2/28/63 C
TOR-169(3126)-9	Gemini Launch Vehicle Monthly Performance Report	12/15/62 C
TOR-169(3126)-10	Gemini Launch Vehicle Pilot Safety Program	1/ /63 U

Section IV. TECHNICAL OPERATING REPORTS (continued)

TOR-169(3126)-11 Weight Reduction Study for the Gemini Launch Vehicle Instrumentation Study 12/28/62 U

TOR-169(3126)-12 Gemini Launch Vehicle Monthly Performance Report 1/15/63 C

TOR-169(3126)-13 Gemini Launch Vehicle Monthly Performance Report 3/15/63 C

TOR-169(3128-01)-1 Program 461 Orbital Requirements Document Number 11200 1/10/63 S

TOR-169(3151)-7 Program 479A Final Flight Evaluation Report Target Vehicle No. 103-A Launched with Titan Booster M-7 17/63 S

TOR-169(S3151)-10 Final Flight Evaluation Report Program 479A Operation "All Jazz" Flight Test No. L-1, Mission No. K-1 12/12/62 S

TOR-169(S3151)-11 Final Flight Evaluation Report Program 479A Operation "First Try" Flight Test No. D-2, Mission No. K-2 12/17/62 S

TOR-169(S3151)-12 System Test Objectives Program 479A Flight Test No. K-12, VAFB, California 12/26/62 S

TOR-169(S3151)-13 Program 479A Interim Flight Evaluation Report Operation "Closed Circuit" Flight Test No. L-4, Mission K-5 12/28/62 S

TOR-169(S3151)-14 System Test Objectives Program 479A Flight Test No. K-9, VAFB, California 1/11/63 S

Section IV. TECHNICAL OPERATING REPORTS (continued)

TOR-169(S3151)-15 System Test Objectives Program 479A
Flight Test No. K-8, VAFB, California 1/14/63 S

TOR-169(S3151)-16 Program 479A* Interim Flight Evaluation
Report Operation "Deer Park" Flight Test
No. L-5, Mission No. K-6 2/1/63 S

TOR-169(S3151)-17 System Test Objectives Program 479A
Flight Test No. K-10, VAFB, California 2/8/63 S

TOR-169(S3151)-18 Program 479A Interim Flight Evaluation
Report Operation "Oak Tree" Flight Test
No. L-5, Mission K-4 2/8/63 S

TOR-169(S3151)-19 System Test Objectives Program 479A
Flight Test No. K-14, VAFB, California 2/21/63 S

TOR-169(S3151)-20 Program 479A Interim Flight Evaluation
Report Operation "Fly High" Flight Test
No. L-7, Mission K-7 2/15/63 S

TOR-169(S3151)-21 System Test Objectives Program 479A
Flight Test No. K-17, VAFB, California 3/11/63 S

TOR-169(S3151)-22 System Test Objectives Program 479A
Flight Test No. K-21, VAFB, California 3/18/63 S

**TOR-169(S3153)-5,
Supp. 1** Flight Test Directive, Part A,
No. 10-441-003, Re-entry Systems
Program--STV-WSMR 3/1/63 U

TOR-169(S3153)-6 Systems Test Objectives Reduced
Radar Cross Section Program
CS-IIFT Flight Test 12/ /62 S

Section IV. TECHNICAL OPERATING REPORTS (continued)

TOR-169(S3153-20)-1 Systems Test Objectives Reduced
Flight Test Directive, Part A
N8.10-441-011 Re-entry Systems
Program STY-WSMR

12/28/62 S

TOR-169(S3153-20)-1 Radar Cross Section Program
REXX II Flight Test, Atlas 135-F

3 / 1/63 S

Section V. TECHNICAL DOCUMENTARY REPORTS

TDR-169(3128-02)TN-1 Analysis of Intrinsic Photoconductors Used for Infrared Imaging Purposes A. S. Gutman 11/30/62 U

TDR-169(3153-06)TR-1 Thermoelastic Vibrations of a Beam J. P. Jones 2/20/63 U

TDR-169(3210-10)TR-1 Comparison of Solid and Storable Liquid Minuteman Missiles S. A. Johnston 1/14/63 C

TDR-169(3210-10)TR-2, Propulsion Research: Propellant Chemistry Investigation, Semiannual Technical Report (1 July-31 December 1962) L. Schieler 2/28/63 U

TDR-169(3210-10)TR-2, Propulsion Research: Propellant Chemistry Investigation, Semiannual Technical Report (1 July-31 December 1962) L. Schieler 2/28/63 C

TDR-169(3230-11)TN-8 Quasi-Static Aero-Thermo-Elastic Analysis: Analytical Development and Computational Procedure W. P. Rodden, E. F. Farkas, H. A. Malcom 3/1/63 U

TDR-169(3230-11)TN-9 A Shock Tube for Producing Subsonic, Transonic, and Supersonic Flows for Aerodynamic Testing R. L. Varwig 2/18/63 U

TDR-169(3230-11)TN-10 Status Report on the Aerospace Hypersonic Shock Tunnel R. L. Varwig 2/21/63 U

TDR-169(3230-11)TN-11 Photoelastic Analyses of Thermal Stresses in Notched Shells and Beams C. H. Tsao, A. Cheng, S. Okubo 2/26/63 U

Section V. TECHNICAL DOCUMENTARY REPORTS (continued)

TDR-169(3230-12)TR-2 Aeromechanics Program: Heat Transfer and Fluid Mechanics, Semiannual Technical Report [1 July-31 December 1962] P. M. Chung, W. S. Lewellen, D. J. Spencer

TDR-169(3230-12)TN-4 An Approximate Analysis of Simultaneous Gas-Phase and Surface Atom Recombination for Stagnation Boundary Layer P. M. Chung, S. E. Liu

TDR-169(3230-12)TN-5 Test Time in Low Pressure Shock Tubes H. Mirels

TDR-169(3230-22)TN-2 Transmission Through a Plasma Sheath in the Presence of a Floating Dielectric Slab K. M. Soo Hoo

TDR-169(3240-10)TR-2 Computation of the Repeated Integrals of the Error Function Complement W. R. Wilcox

TDR-169(3240-10)TR-3 Heat Transfer in Power Transistors W. R. Wilcox

TDR-169(3240-11)TN-2 Yielding and Flow of Iron H. Conrad

TDR-169(3240-31)TR-2 A Portfolio of Experience in Refractory Metal Protective Systems Research D. H. Leeds

TDR-169(3250-42)TN-1 Cascaded Binary Error Codes, Part 1: Performance Criteria for Cascaded and Other Error Codes W. Altar

TDR-169(3260-20)TN-1 Preliminary Analysis of the Flux and Spectra of Trapped Particles Following the Nuclear Test of July 9, 1962 F. S. Mozer, D. D. Elliott, J. D. Mihalov, G. A. Paulikas, A. L. Vampola, S. C. Freden

Section V. TECHNICAL DOCUMENTARY REPORTS (continued)

TDR-169(3260-50)TN-1	Ultraviolet Radiometer Experiment for the Target Radiation Measurement Program (TRUMP)	R. D. Rawcliffe, G. E. Meloy, R. L. Williams	2/6/63 U
TDR-169(A3301-03)TR-1	Effects of Flame Plasma on RF Signal Strength for AMR Tests 813, 1332, and 1911	J. H. Gross	2/15/63 S
TDR-169(3305)TN-1	Materials and Fabrication Survey of Maraging Steels for Large Solid Rocket Motor Cases	H. Smallen L. Gatzek, A. J. Gironda	10/24/62 U
TDR-169(3305)TN-2	Derivation of Approximating Polynomials for Function 1-ev	S. H. Lewis	1/21/63 U
TDR-169(S3335)TN-1	A Review of Theoretical Liquid and Hybrid Rocket Propellant Performance	S. A. Greene	2/1/63 U
TDR-169(3408)TR-2	Configuration Management, the Intent of AFSCM 375-1	G. L. Samuels	1/30/63 U
TDR-169(3506-20)TR-1	Space Offense Systems Parametric Configuration Study	---	3/1/63 S
TDR-169(3530-20)TN-1	Gravity Gradient Excitation of a Rotating Cable-Counterweight Space Station in Orbit	V. Chobotov	1/11/63 U
TDR-169(3560-10)TN-1	Approximate Solutions of the Lateral Motion of Re-entry Vehicles During Constant Altitude Glide	H. E. Wang	2/25/63 U
TDR-169(3560-30)TR-2, Vol. 1	The Dynamic Stability of Elastic Systems, Trans. by V. I. Weingarten, Volume I (by V. V. Bolotin)	K. N. Trirogoff, K. D. Gallegos	11/1/62 U

Section V. TECHNICAL DOCUMENTARY REPORTS (continued)

TDR-169(3560-30)TR-2, Vol. II	The Dynamic Stability of Elastic Systems, Volume II (by V. V. Bolotin)	Trans. by V.I. Weingarten, K.N. Trirogoff, K.D. Gallegos	12/10/62 U ②
TDR-169(3560-30)TR-2, Vol. III	The Dynamic Stability of Elastic Systems, Volume III (by V. V. Bolotin)	Trans. by V.I. Weingarten, K.N. Trirogoff, K.D. Gallegos	2/1/63 U ②
TDR-169(3560-30)TN-1	A Survey of Buckling Theory and Experiment for Circular Conical Shells of Constant Thickness	P. Seide	11/12/62 U ②
TDR-169(3560-30)TN-2	Buckling of a Truncated Hemisphere Under Axial Tension	J. C. Yao	11/12/62 U ②
TDR-169(3560-30)TN-4	Thermoelastic Differential Equations for Shells of Arbitrary Shape	J. C. Yao	1/14/63 U ②
TDR-169(3580-10)TR-1	Large Payload Weapon Considerations	---	12/14/62 S ②
TDR-169(3711-01)TN-1	Cycles and Equipment for Producing Low Temperatures	G. H. Zenner	1/15/63 U ②
TDR-169(3711-01)TN-2, Vol. I, No. 1	Applied Research Programs Abstract Bulletin--Aerospace Vehicle Detection and Defense Techniques (Vol. I) Abstracts 1-1 through 1-174	---	1/ /63 S RD ②
TDR-169(3712-01)TR-1	Space Radiation Effects on Solar Cell Final Status and Evaluation Report Bambi Phase II Study	R. A. Barney	12/28/62 U ②
TDR-169(3780)TN-3		---	2/22/63 S ②

Section V. TECHNICAL DOCUMENTARY REPORTS (continued)

TDR-169(3780)TN-4	Bambi, Phase II Guidance Study, a Digital Computer Program for the Interception of One Target by One Interceptor	-----	2/20/63 S
TDR-169(3780)TN-5	Bambi Effectiveness Evaluation Model and Simulation (Beemas)	E. Kamiya	1/31/63 C

* * * * * Section VI. OTHER REPORTS *

TOR-930(S2113)-6

Program 479A Final Flight Evaluation Report, Target Vehicle No. 102 Launched with Titan Booster J-22 (AMR Test No. 4502)

TDR-930(2701-01)TN-1, Vol. II, Part 1, No. 4

Applied Research Programs Abstract Bulletin, Flight Vehicle Power and Materials, Vol. II, Part 1; Abstracts 2-317 through 2-398

12 / /62 S

10-12 / /62 U